

# LTR-RBR REMOTE BELL RINGER

Installation & User's Guide

#### THIS EQUIPMENT COMPLIES WITH FCC CLASS-B REQUIREMENTS PURSUANT SUBPART J OF PART-15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

NOTE:: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.
   This Class B digital apparatus complies with Canadian ICES-003.
   Cet appariel numerique de la classe B est conforme a la norme NMB-003 du

Canada.

# OPERATION, INSTALLATION AND MAINTENANCE MANUAL

### "REMOTE BELL RINGER"

#### LATHEM TIME CORP

Doc #USG0027A

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### Welcome to the LTR-RBR (Remote Bell Ringer)

Lathem's LTR8-512 Master Controller for Clocks and Bells is capable of storing up to eight (8) Schedules for Bells and Control Zones, each of which may contain up to sixty-four (64) multi-function 'Events'. An 'Event' may be defined by a very simple instruction, such as "Ring the Bell on Circuit #4 for 3-seconds every day at 3:00PM", or it may contain a more complicated definition, as, "On Mondays, Wednesdays, Fridays and Holidays, Activate Circuits #2, #3 and #4 at 2:45PM for a duration of 7-seconds." While eight Schedules may be stored in the Master, the User may select which of the eight may be 'Active'. As time advances each minute, the day and time are automatically compared against the Events stored in the Schedules which have been selected as 'Active'. If a match is found, the programmed Event is executed. The Master Controller also provides the capability for Manually Activated Bells, through the use of KeyPad Function [#][3][#], which allows the user to select one or more of the Bell Circuits to be activated by subsequent press of the [#] key.

The "Remote Bell Ringer", an accessory for the LTR8-512 Master Controller (Firmware v4.08 and above, only), allows an Operator to

select and activate one (1) of the eight (8) possible Bell Circuits or all Bell Circuits (those circuits not defined as Clock Control Circuits) in the Master Controller. The selection made will execute when the push button on the Remote Bell Ringer's Panel is pressed, and those circuits will remain activated until the button is released

The Assembly of the Remote Bell Ringer consists of an Electronic Circuit suspended beneath a cover plate for a double-gang switch-type electrical box (not supplied with the product). The Circuit includes a low-power MicroProcessor, a method of selecting the 'Address' of the Master to be remotely controlled, and a 4-screw Terminal Block for Installer Interconnect. Two screws of the Terminal Block are for attachment of the Twisted-Pair (Cat-3 typical) low-voltage Network Communications Cable to the Master's RS-485 Port. The other two screws are to be used for supplying 9-24V AC/DC as continuous power source to the unit.

On the face of the cover plate are a 9-position Rotary Switch (to select the Circuits to be made 'Active'), a Push Button to send the Command to the Master, and an array of lighting Status Indicators by which the Operator can receive confirmation from the Master that the Manual Bells Command has been accepted and acted upon.

## **Installing the LTR-RBR**

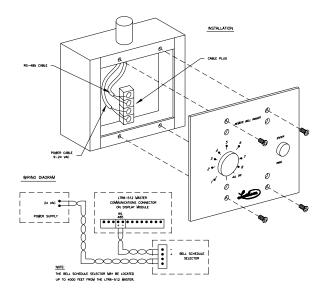
To install the Remote Bell Ringer, simply set the hidden Address Selector switch / jumpers to match the Master's Programmed Address (default = Code 65) and attach the Communication Cable wire-pair (with proper polarity) and the low-voltage Power Pair to the Terminal Block, then secure the cover-plate to the electrical box with four 6-32 FH screws.



DEFAULT SETTING:

BAUD = 9600 BPS

ADDR = 64+1=65



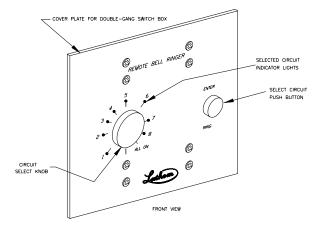
# **Operational Description**

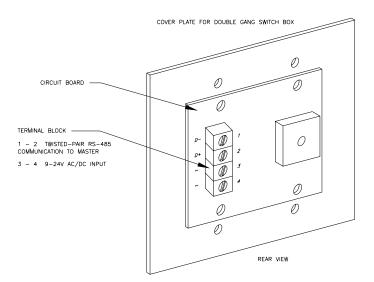
To use the Remote Bell Ringer, the Operator will first select, via the Rotary Switch, which of the Bell Circuits are to be made active. Selected Circuits that are not configured as Bell Circuits in the Master Controller will be ignored

- The 'OFF' position may be used to de-activate all Bell Circuits
- Positions '1' to '8' may be used to select a single Bell Circuit to be made 'Active'
- The 'ALL' position may be used to activate all circuits configured as Bell Circuits.

After setting the selected position of the Rotary Switch, the Operator should press the 'ENTER SELECTION' Push-Button. This will 'wake-up' the Microprocessor (indicated by a brief 'flash' of the indicators) which will, in turn, read the Switches and transmit the appropriate Command to the Master. It will wait for a reply from the Master, which will indicate the Bell Circuits which are now Active, and display that information on Lighting Indicators as confirmation to the Operator that the Command has been accepted and executed by the Master. The lit Indicators will remain active for 2 seconds after the button is released, after which the unit will go back to 'sleep mode', to conserve power.

# Master Control/Remote Bell Ringer





#### **Limited One-Year Limited Warranty**

Lathem warrants the hardware products described in this guide against defects in material and workmanship for a period of **one year** from date of original purchase from Lathem or from an authorized Lathem reseller. The conditions of this warranty and the extent of the responsibility of Lathem Time Corporation ("Lathem") under this warranty are listed below.

- This warranty will become void when service performed by anyone other than an approved Lathern warranty service dealer results in damage to the product.
- This warranty does not apply to any product which has been subject to abuse, neglect, or accident, or which has had the serial number altered or removed, or which has been connected, installed, adjusted, or repaired other than in accordance with instructions furnished by Lathem.
- This warranty does not cover dealer labor cost for removing and reinstalling the machine for repair, or any expendable parts that are readily replaced due to normal use.
- The sole responsibility of Lathern under this warranty shall be limited to repair of this product, or replacement thereof, at the sole discretion of Lathern.
- If it becomes necessary to send the product or any defective part to Lathem or any authorized service dealer, the product must be shipped in

its original carton or equivalent, fully insured with shipping charges prepaid. Lathem will not assume any responsibility for any loss or damage incurred in shipping.

- 6. WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY:
  Except only the limited express warranty set forth above, the products are sold with no expressed or implied warranties of any kind, and the implied warranties of merchantability and fitness for a particular purpose are hereby expressly disclaimed. No warranties are given with respect to products purchased other than from Lathem or an authorized Lathem reseller and any such products are purchased "as is, with all faults." In no event will Lathem be liable for any direct, indirect, special, incidental or consequential damages arising out of or in connection with the delivery, use or inability to use, or performance of this product. In the event any limited remedy given herein shall be deemed to have failed of its essential purpose, Lathem's maximum liability shall be to refund the purchase price upon return of the product.
- 7. Proof of date of purchase from Lathem or an authorized Lathem reseller is required for warranty service on this product.
- This Warranty grants specific legal rights. Additional legal rights, which may vary by locale, may also apply.
- Should any difficulties arise with the performance of this product during warranty, or with any Lathem authorized service centers, contact Lathem Time at the address below.

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